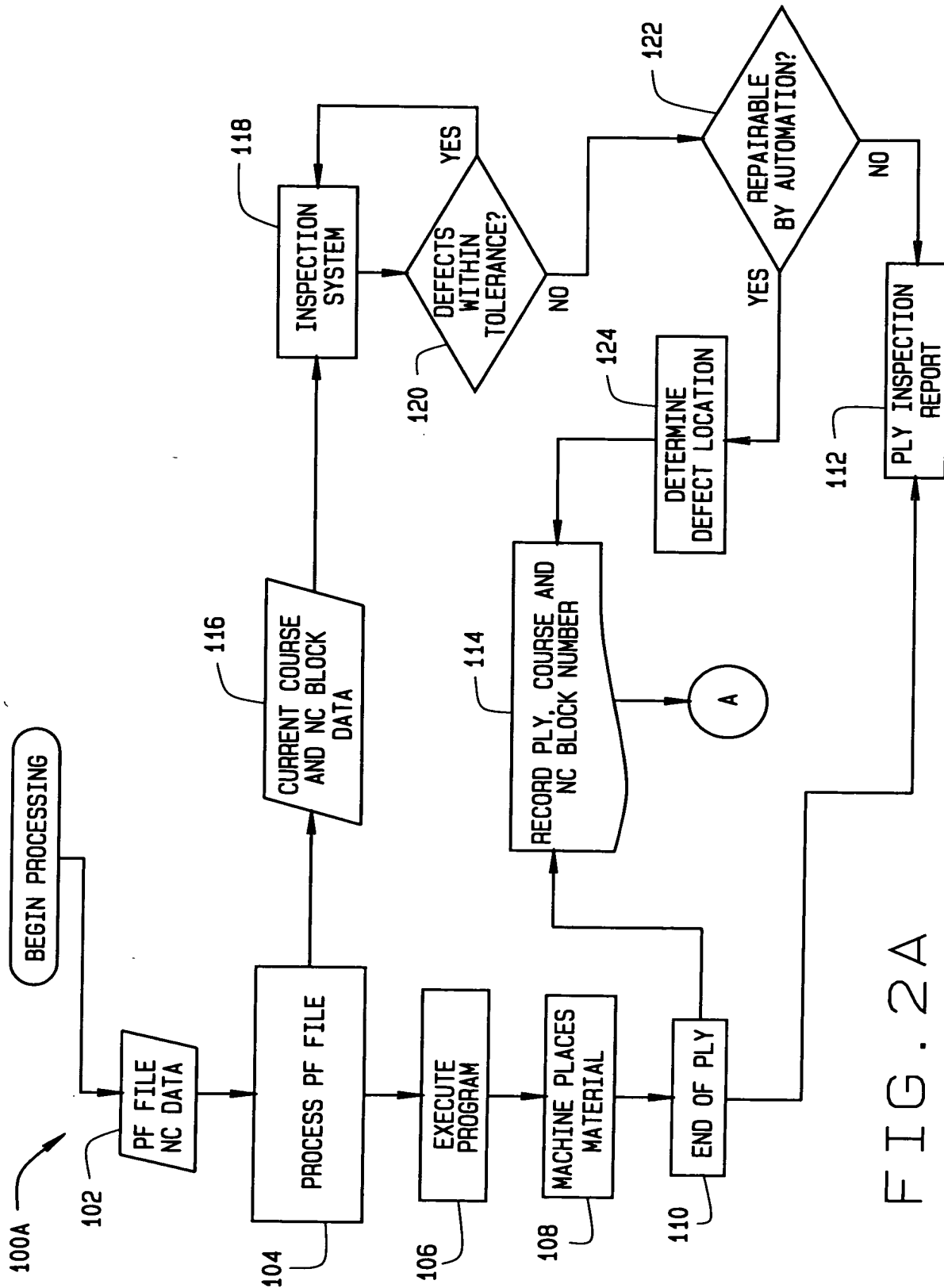
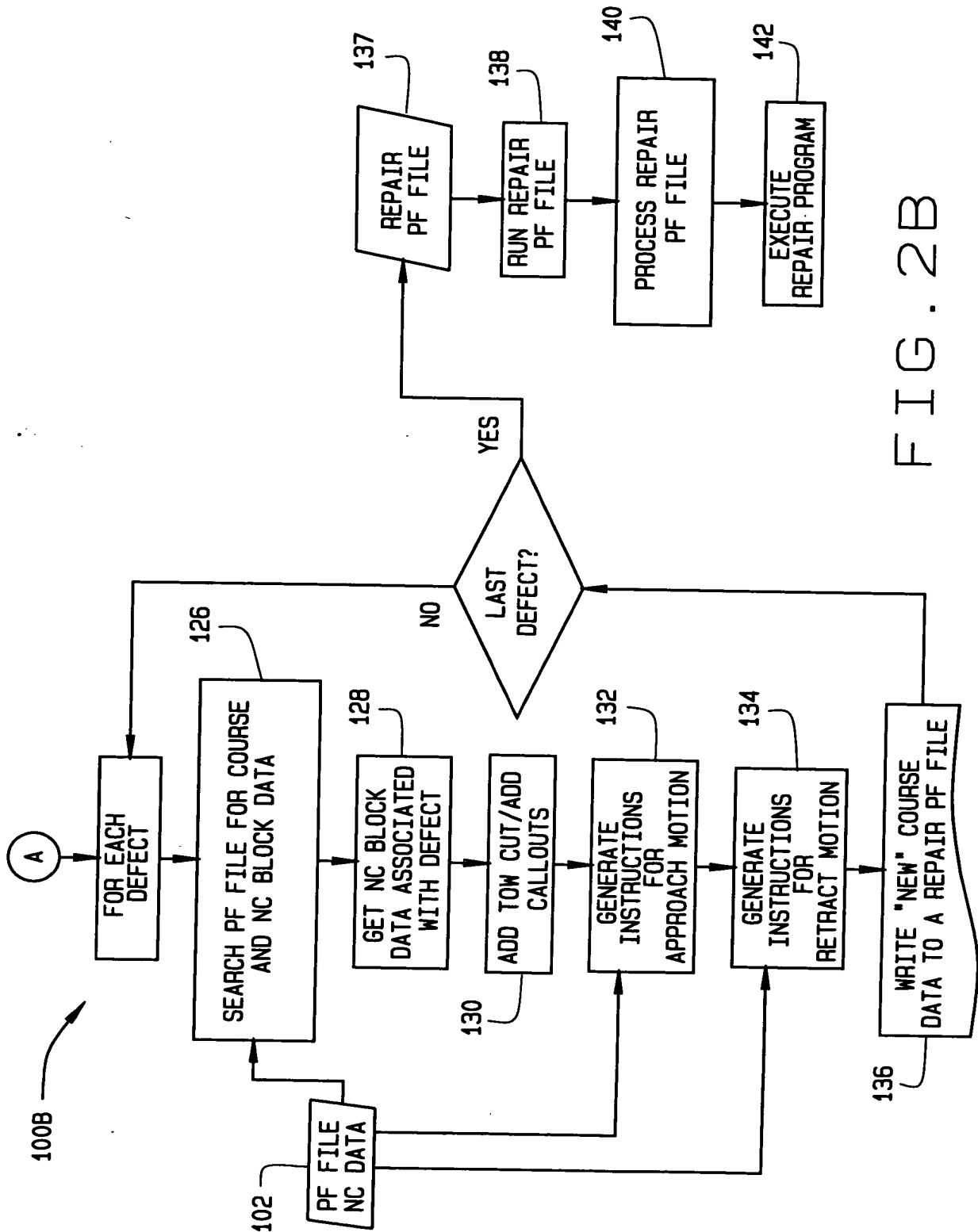
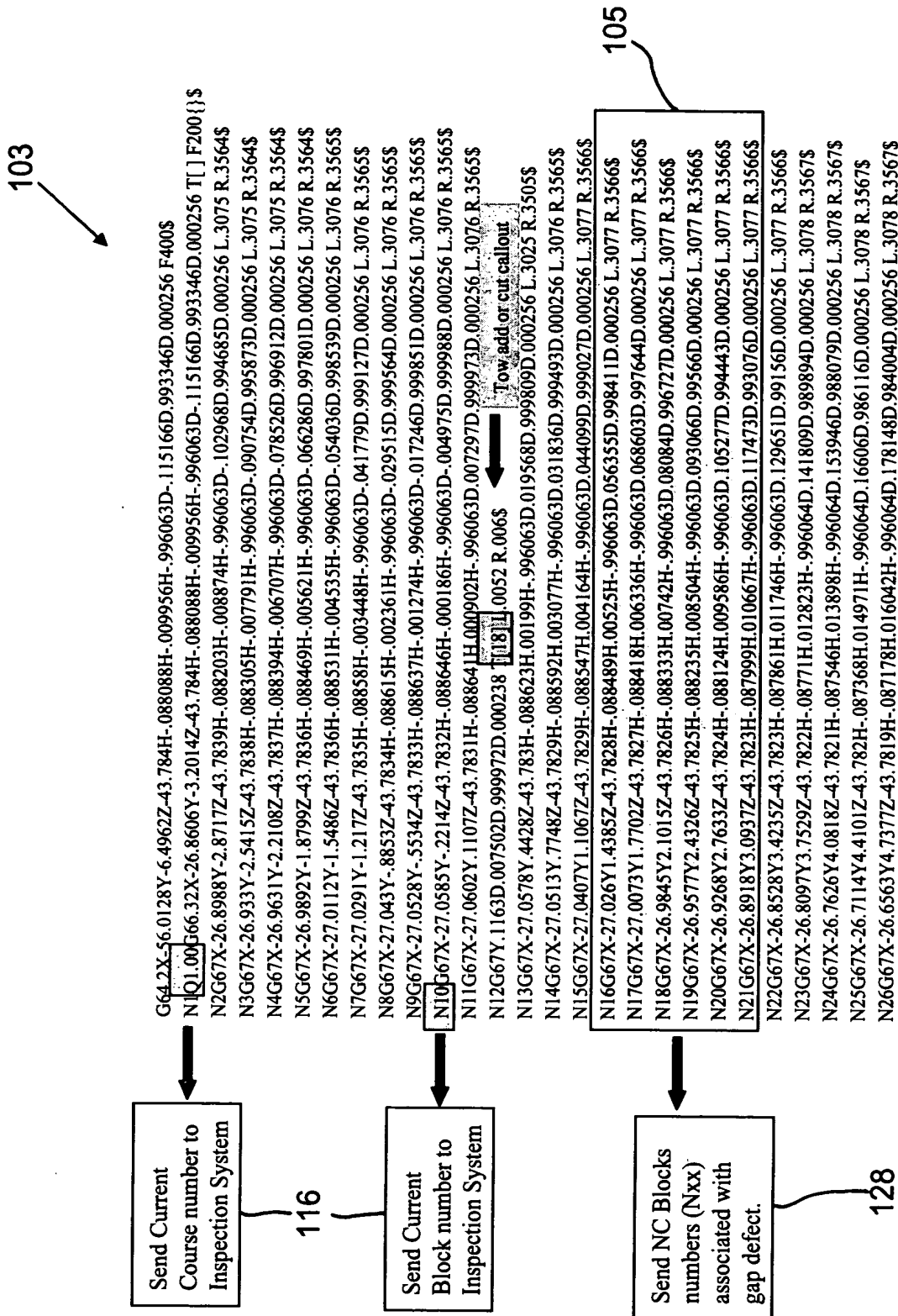


FIG. 1







Title: SYSTEMS AND METHODS ENABLING AUTOMATED RETURN TO AND/OR REPAIR OF
DEFECTS WITH A MATERIAL PLACEMENT MACHINE

Inventors: Engelbart et al

Atty. Ref.: 7784-000624

Attorney Anthony G. Fussner (314) 726-7500

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Retract and Approach motion between courses.

N75G67X-21.0014Y24.256Z-40.3284H-.523185H.625822H-.578467D.475303D.77768D.411462 T1] L.2105 R.22785
N76G67X-20.9694Y24.3135Z-40.3008H-.520986H.626242H-.579996D.476623D.777133D.410967 L.0691 R.07485
N77G67X-20.7996Y24.6094Z-40.1583H-.510021H.627664H-.588147D.482329D.774838D.408639 L.3593 R.38715
N78G67X-20.5445Y25.0405Z-39.9483H-.495813H.627241H-.600615D.495996D.772242D.397027 L.5235 R.54925
N79G67X-20.1859Y25.6163Z-39.6704H-.489899H.602916H-.629676D.482231D.789137D.380416 L.7311 R.76535
N80G67X-19.8706Y26.1118Z-39.4231H-.471868H.602715H-.643487D.494341D.785198D.372949 L.6196 R.65295
N81G67X-19.5431Y26.6058Z-39.1746H-.455301H.599345H-.658396D.494171D.785243D.37308 L.6296 R.66665
G64.4X-32.7956Y44.051Z-39.1746H-.455301H.599345H-.658396D.494171D.785243D.37308 F4005
G64.3X-46.0181Y29.9728Z-41.489H-.837935H.54577HOD.54577D.837935D0 F4005
G64.5X-53.549Y12.1877Z-43.8034H-.085443H.019665H-.996149D-.288119D.956602D.043597 F4005
N1Q21.00G66.32X-24.3552Y5.4685Z-43.8034H-.085443H.019665H-.996149D-.288119D.956602D.043597 T1] F200 {}\$
N2G67X-24.4574Y5.8076Z-43.788H-.085193H.020711H-.996149D-.276369D.960062D.043597 L.3321 R.37725
N3G67X-24.556Y6.1503Z-43.7724H-.084932H.021755H-.996149D-.264575D.963379D.043597 L.3343 R.37945
N4G67X-24.6511Y6.4967Z-43.7568H-.084658H.022793H-.996149D-.25275D.966549D.043596 L.3364 R.38165
N5G67X-24.7427Y6.8466Z-43.741H-.084371H.023829H-.996149D-.240891D.969573D.043596 L.3386 R.38395
N6G67X-24.8305Y7.2001Z-43.7251H-.084072H.024862H-.99615D-.228993D.972451D.043597 L.3407 R.38615

FIG. 4

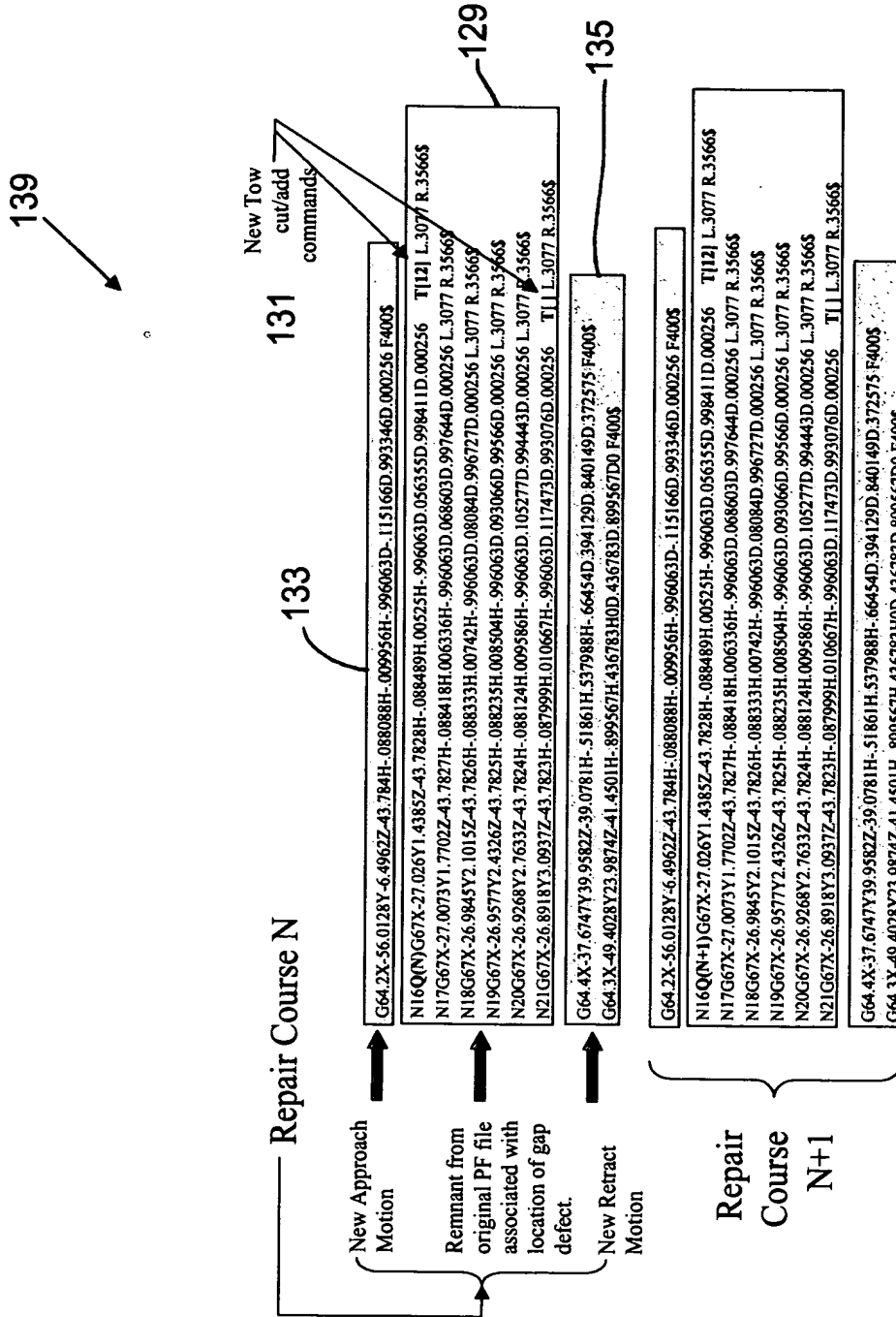
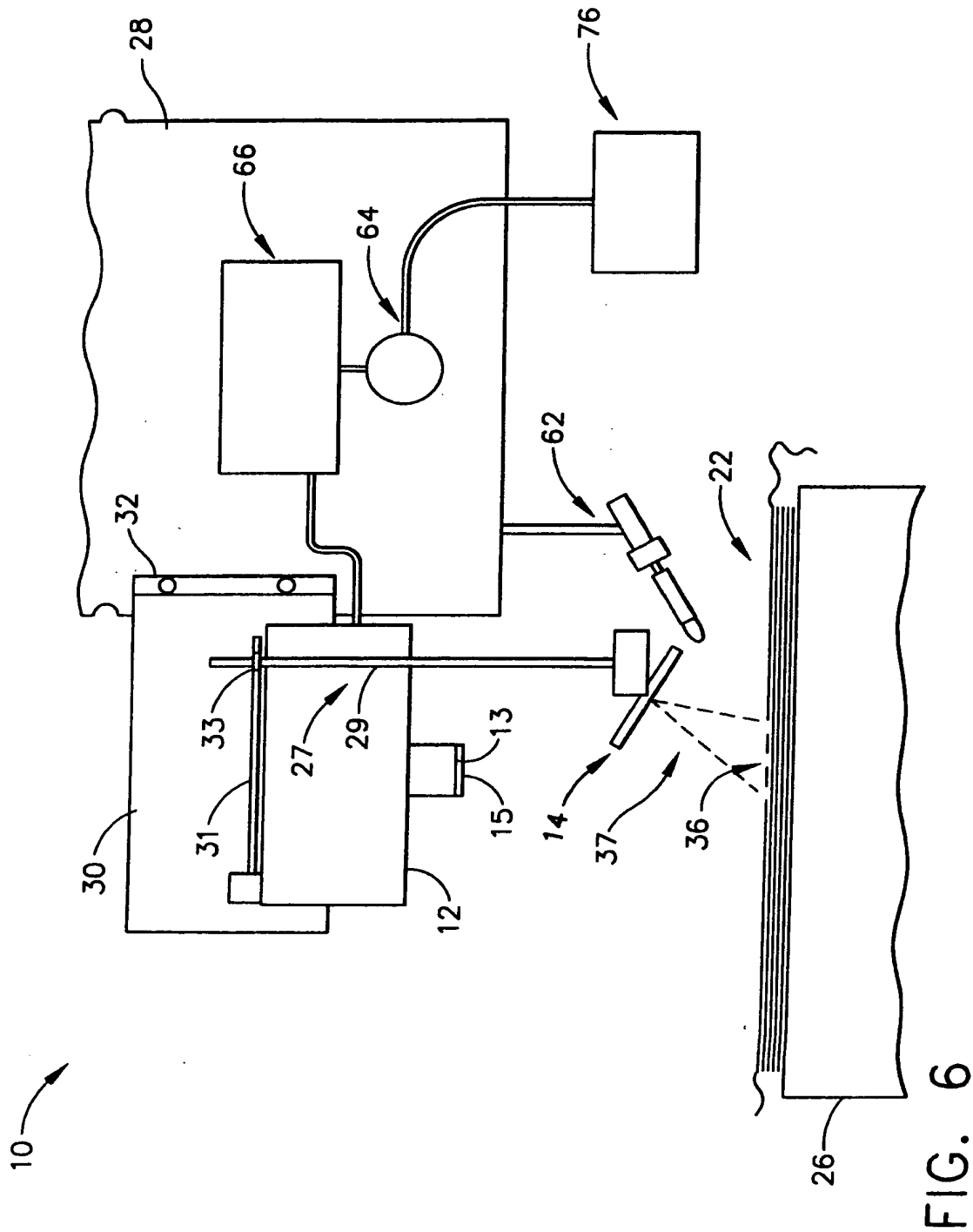


FIG. 5



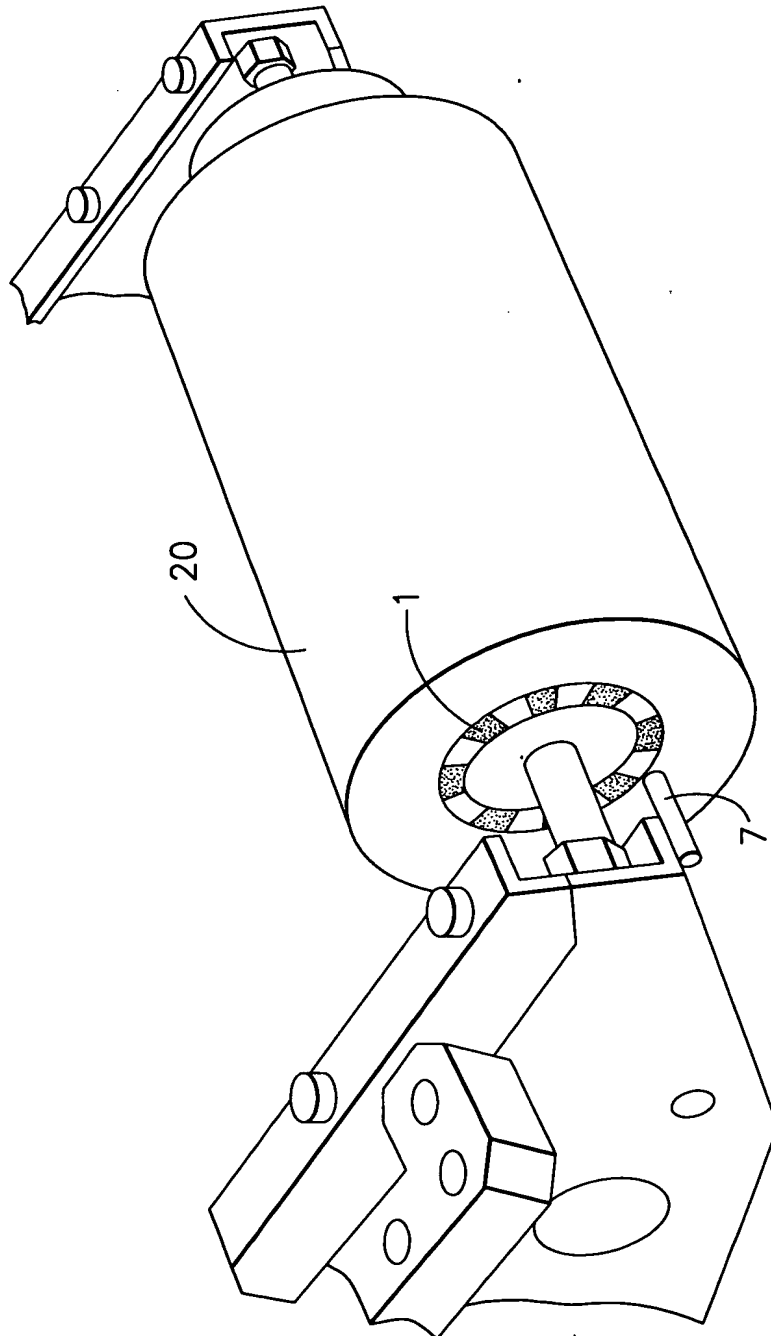


FIG. 7

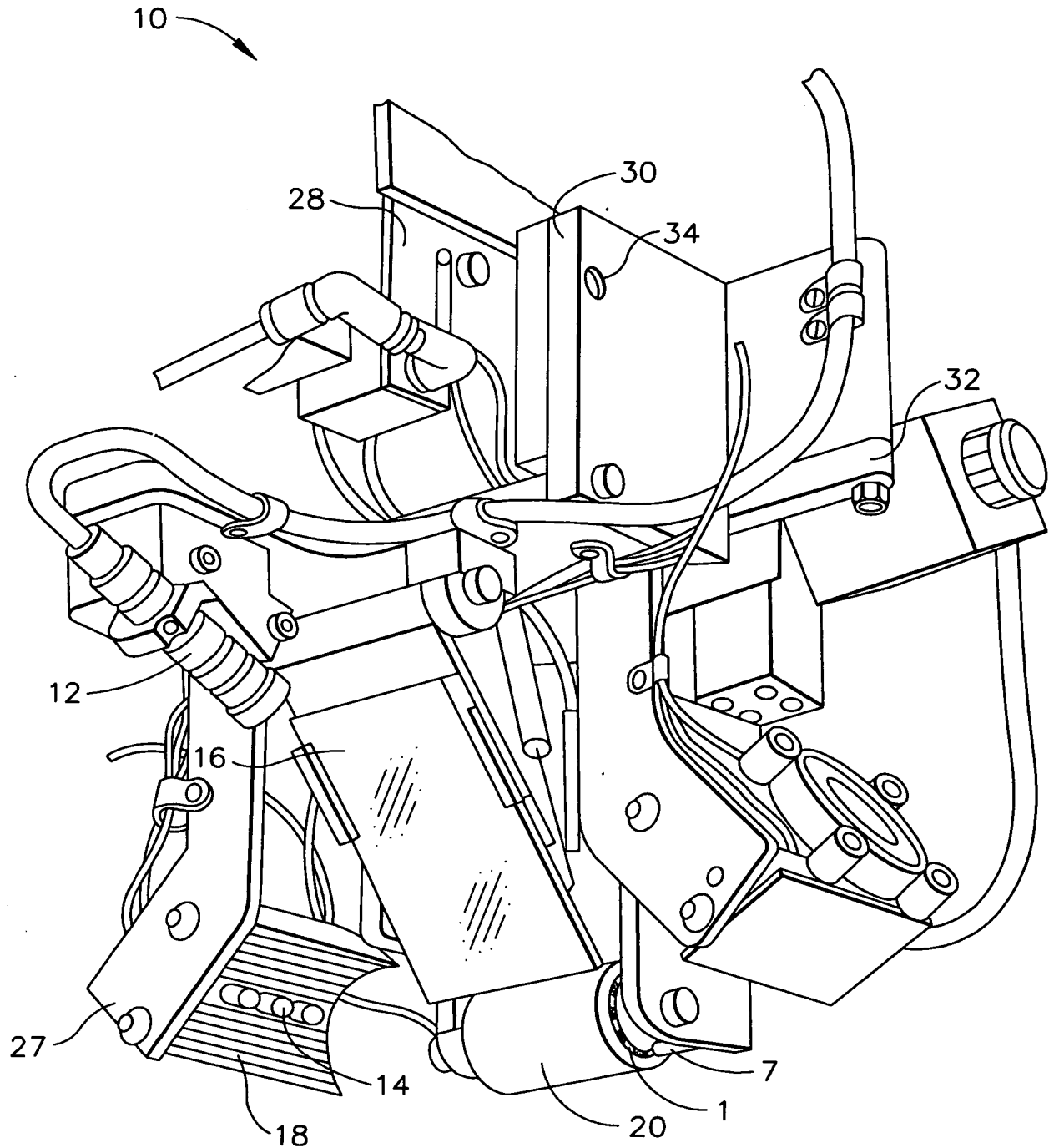


FIG. 8

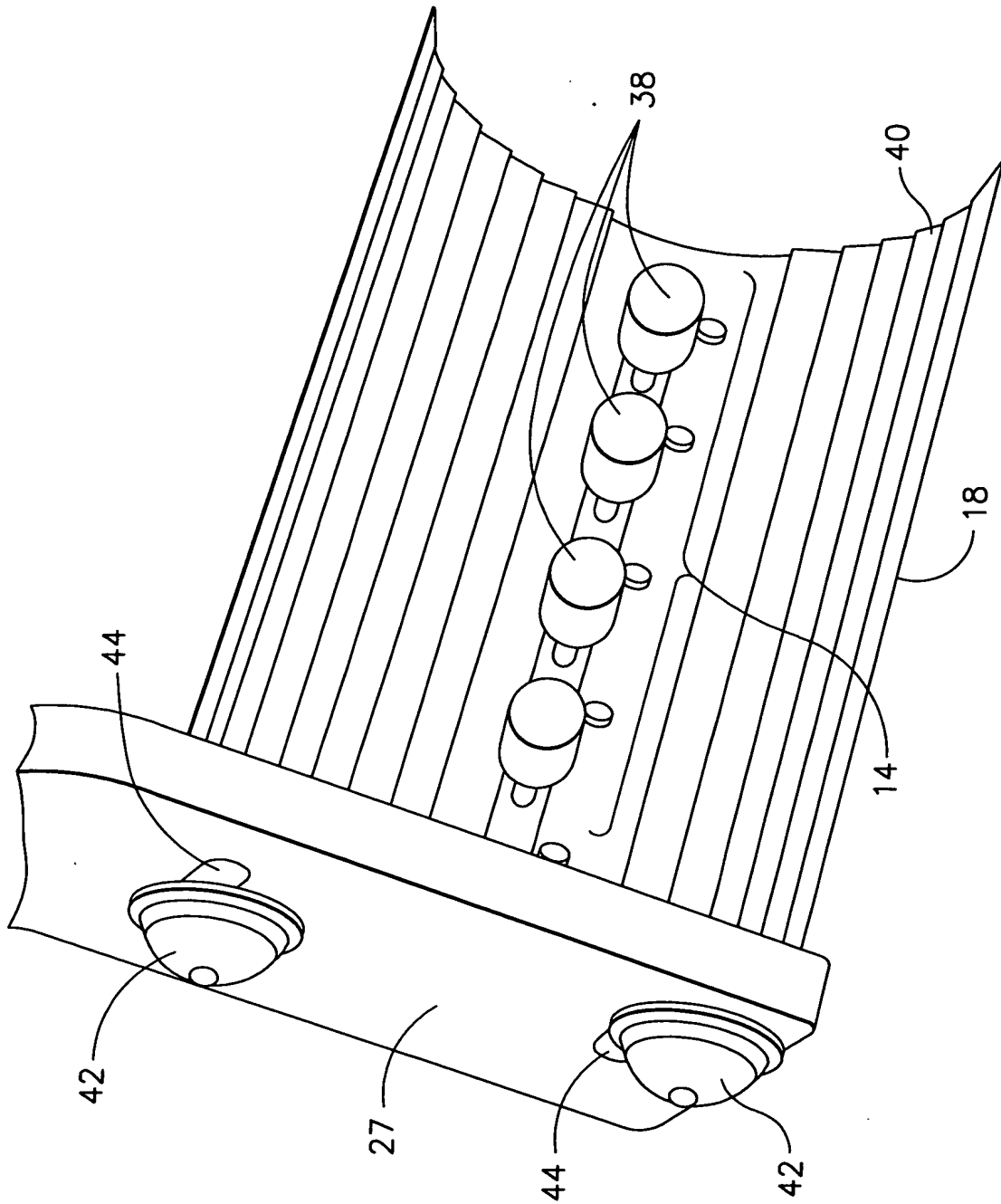
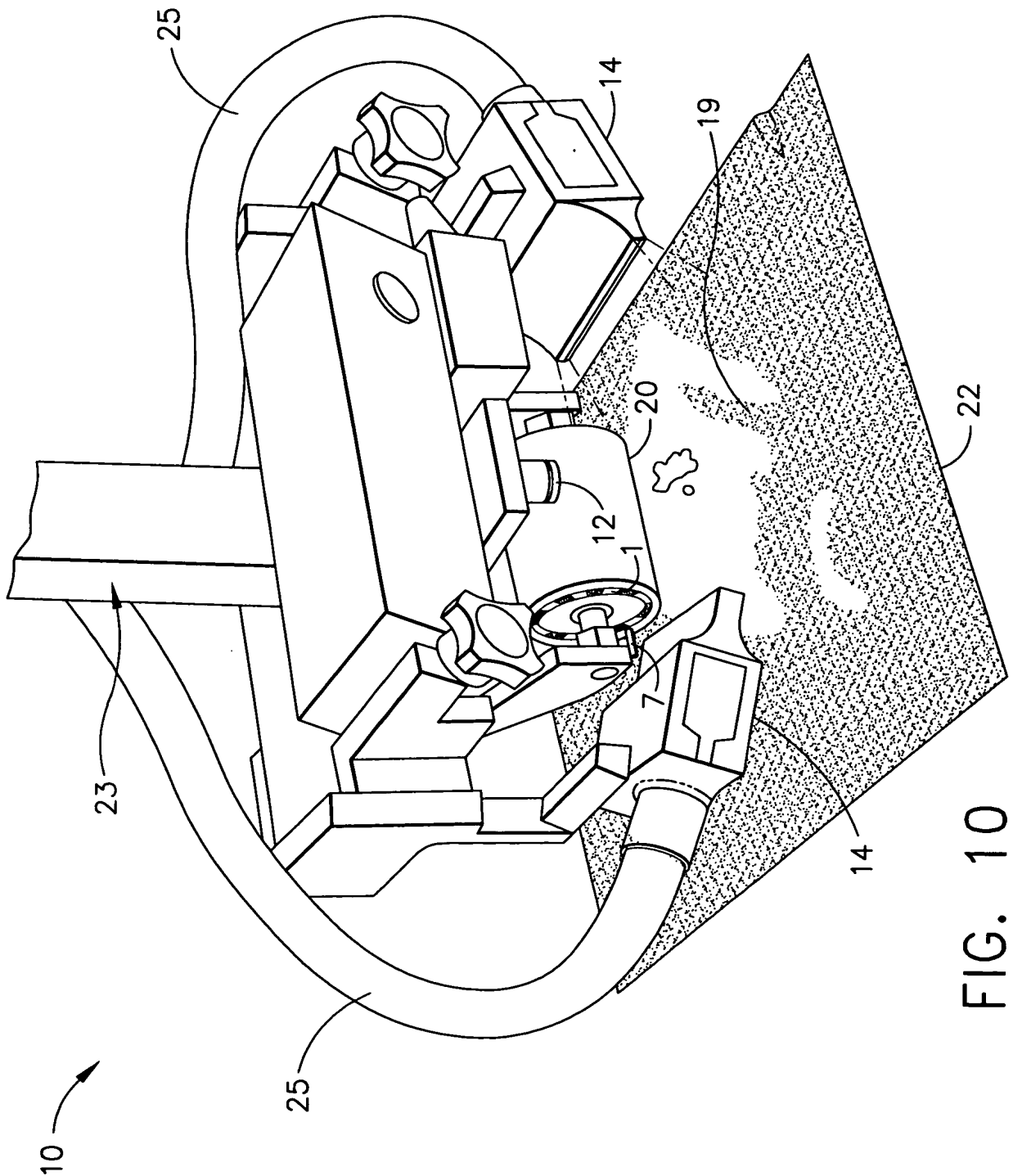


FIG. 9



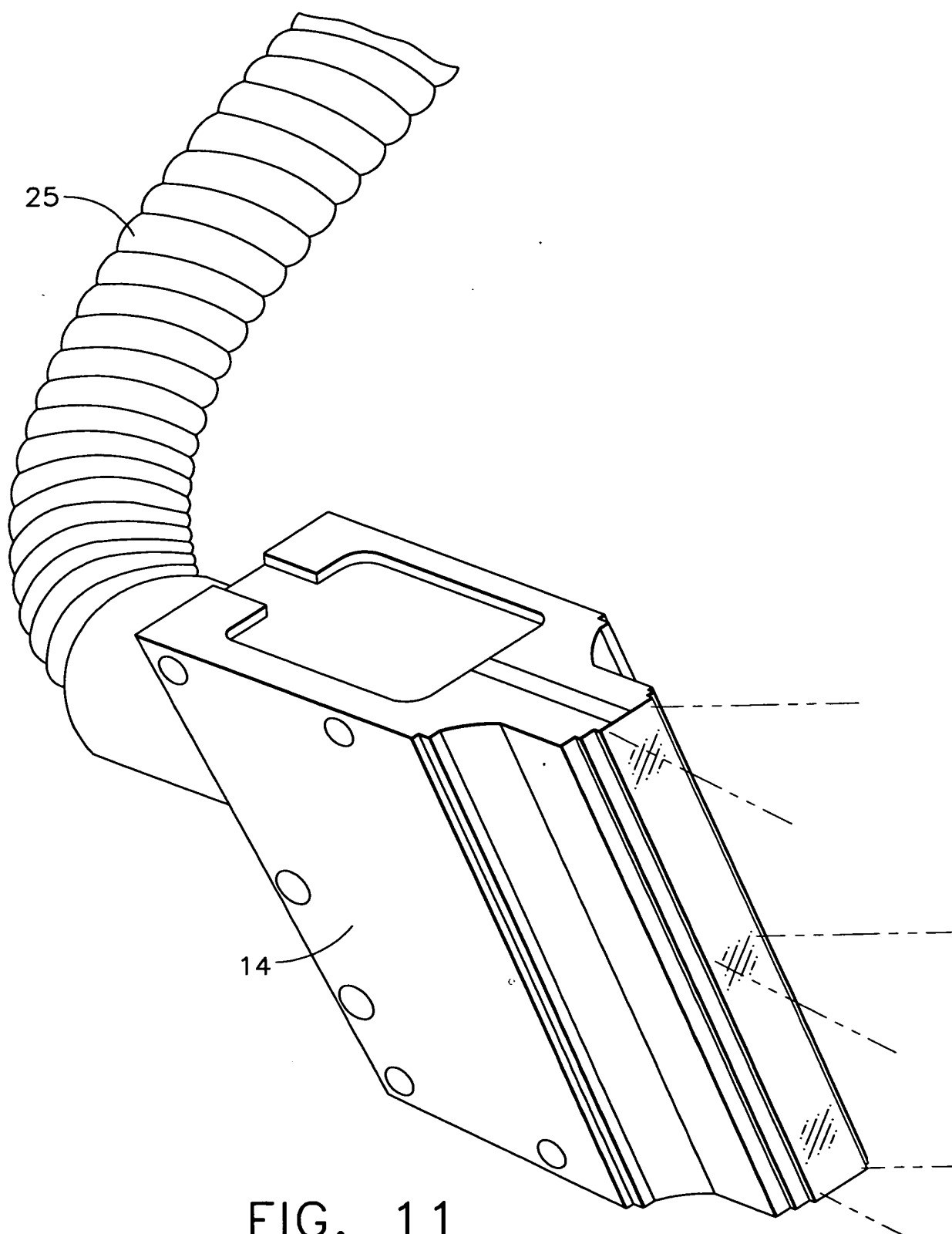


FIG. 11

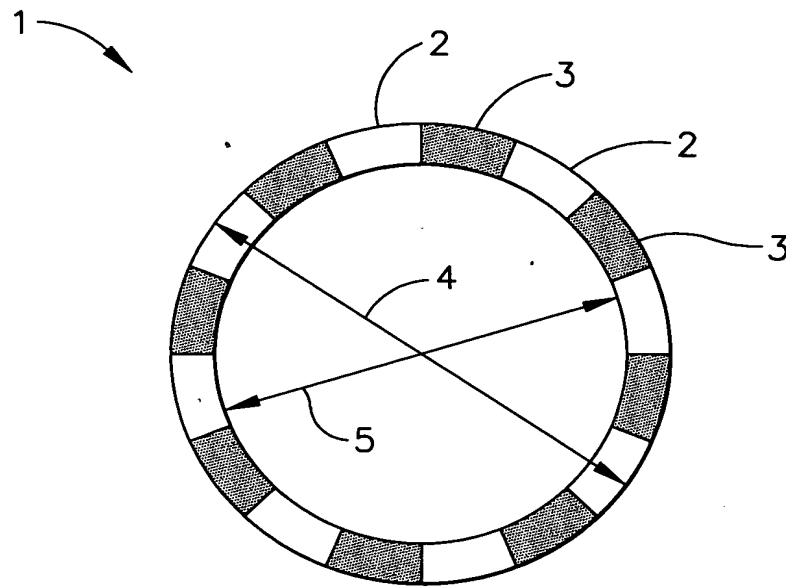


FIG. 12